



● Specifications

Nominal Voltage		12V
Rated Capacity (10 hour rate)		33Ah
Dimensions	Total Height	180±2mm(7.08 inches)
	Height	159±2mm(6.25 inches)
	Length	195±2mm(7.68 inches)
	Width	130±2mm(5.12 inches)
Weight Approx		10.5kg(23.20 lbs)±4%

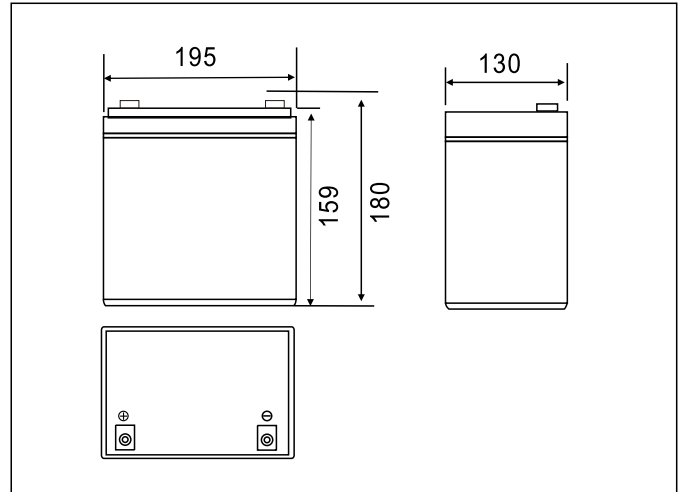
● Characteristics

Capacity 25°C(77°F)	10 hour rate(3.3A) 5 hour rate(5.88A) 1 hour rate(20.5A)	33.0 AH 29.4AH 20.5AH
Internal Resistance	Full charged Battery at 25°C(77°F)	10m Ω
Capacity affected by Temperature (10hour rate)	40°C(104°F)	102%
	25°C(77°F)	100%
	0°C(32°F)	85%
	-15°C(5°F)	65%
Self-Discharge at 25°C(77°F)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
	Capacity after 12 month storage	64%
Charge (constant voltage)	Cycle	Initial Charging Current Less than 9.9 A Voltage 14.50-14.90V
	Float	Voltage 13.50-13.80V

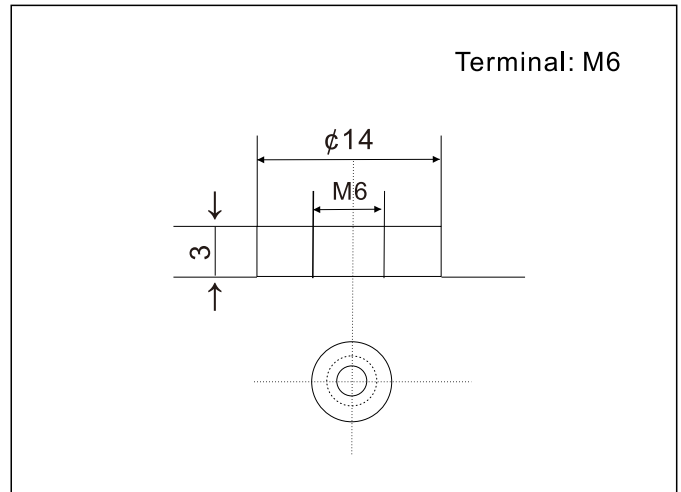
● Applications

- Electric tools
- Electric toys
- Emergency lighting
- Electronic instruments
- Medical equipment
- Alarm and security systems
- Solar power systems
- Wind power systems
- Telecommunication equipments
- Uninterruptible power supplies

● Outer Dimensions (mm)



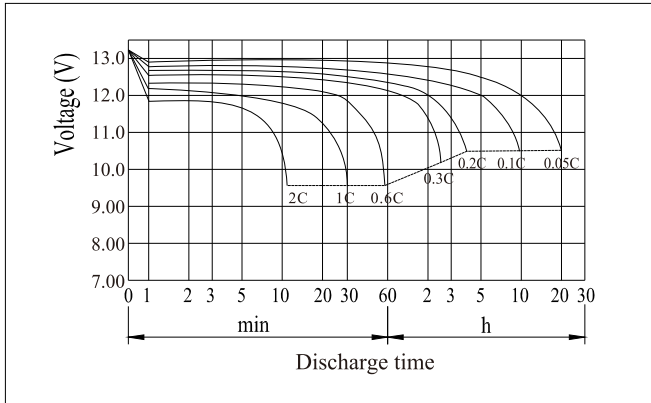
● Terminal Type (mm)



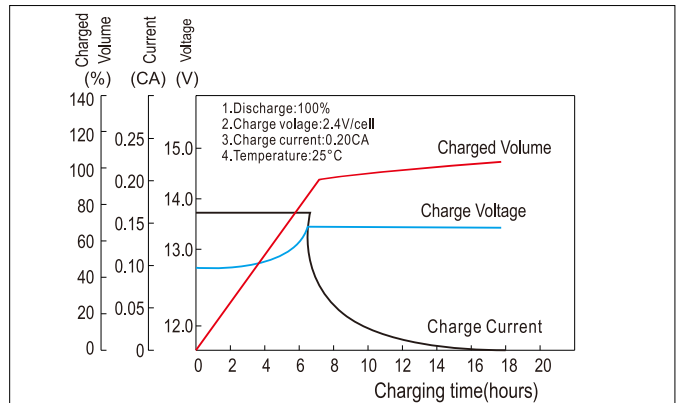
Constant Current(AMP) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	A	44.6	30.8	19.2	11.2	7.92	6.24	5.21	4.46	3.47	3.09	1.69	—	—
	w	497	350	221	131	93.4	73.6	62.0	52.8	41.3	37.0	20.3	—	—
9.90V	A	43.6	30.1	18.9	11.2	7.85	6.20	5.18	4.42	3.43	3.09	1.68	—	—
	w	485	344	218	130	93.1	73.3	61.7	52.5	41.3	37.0	20.3	—	—
10.20V	A	41.9	29.2	18.4	11.1	7.82	6.14	5.15	4.39	3.43	3.08	1.68	0.74	—
	w	467	333	213	129	92.4	72.6	61.1	52.1	40.9	37.0	20.2	8.84	—
10.50V	A	40.6	28.5	18.1	10.9	7.76	6.11	5.12	4.36	3.40	3.06	1.65	0.73	0.30
	w	451	325	208	127	91.7	72.3	60.7	51.8	40.6	36.6	20.0	8.78	3.66
10.80V	A	38.3	27.5	17.5	10.6	7.52	5.91	4.95	4.22	3.30	3.04	1.65	0.73	0.30
	w	428	313	202	123	88.8	70.0	59.1	50.2	39.3	36.3	19.9	8.78	3.63

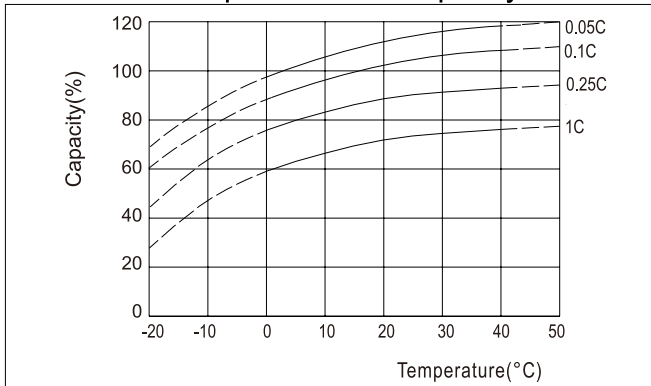
● Discharge Characteristics(25°C)



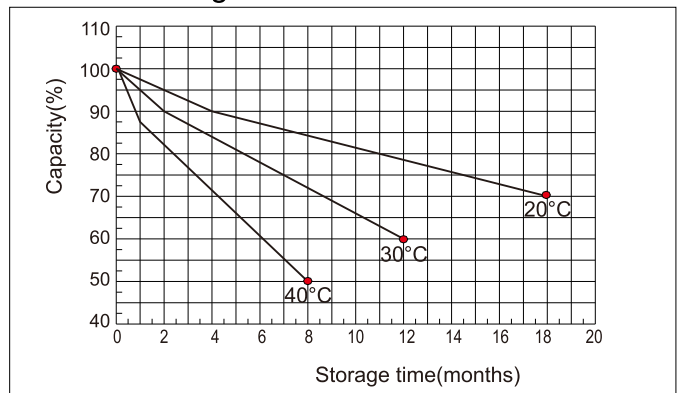
● Charging Characteristics(25°C)



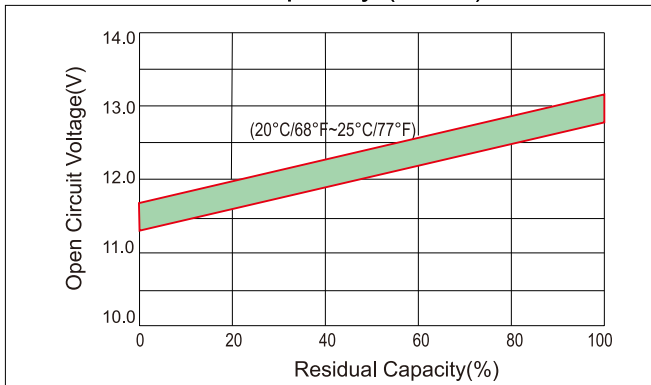
● Effect of Temperature on Capacity



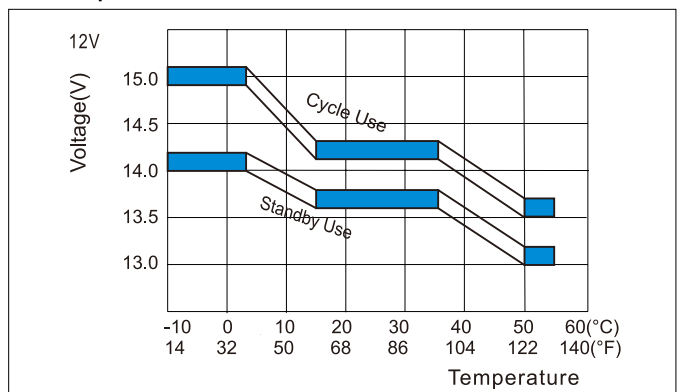
● Self-discharge Characteristics



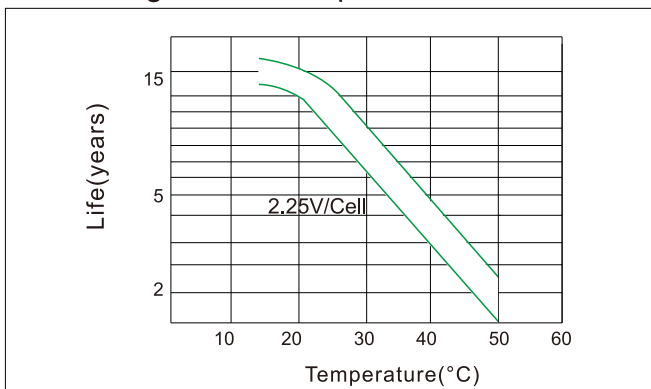
● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



● The Relationship for Charging Voltage and Temperature



● Floating Life on Temperature



● Cycle Life on D.O.D (25°C)

